

Title (en)  
OPTICAL MODULATOR

Title (de)  
OPTISCHER MODULATOR

Title (fr)  
MODULATEUR OPTIQUE

Publication  
**EP 1542063 A4 20100127 (EN)**

Application  
**EP 03795353 A 20030910**

Priority  
• JP 0311546 W 20030910  
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• JP 2003086249 A 20030326

Abstract (en)  
[origin: EP1542063A1] An optical modulator in which stabilized driving is realized over a long time by relaxing stress generated in a recess formed in the surface of a substrate in the optical modulator and controlling deterioration of optical modulation control caused by stress-strain in the substrate including an optical waveguide. The optical modulator comprises a substrate of a material exhibiting electrooptic effect, an optical waveguide (4) provided on the substrate, and control electrodes (20-25) for controlling the phase of light being guided through the optical waveguide characterized in that a recess (12) is provided in the surface of the substrate for forming the control electrodes, and the control electrode (24) being formed on the recess is provided with a stress relaxing means. <IMAGE>

IPC 1-7  
**G02F 1/035**; **G02F 1/03**

IPC 8 full level  
**G02F 1/035** (2006.01); **G02F 1/03** (2006.01); **G02F 1/225** (2006.01)

CPC (source: EP US)  
**G02F 1/0305** (2013.01 - EP US); **G02F 1/0316** (2013.01 - EP US); **G02F 1/225** (2013.01 - EP US)

Citation (search report)  
• [X] JP H0667130 A 19940311 - NIPPON TELEGRAPH & TELEPHONE  
• [A] US 6449080 B1 20020910 - MCBRIEN GREGORY J [US], et al  
• See references of WO 2004025358A1

Cited by  
US11402673B2; WO2018122551A1

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**EP 1542063 A1 20050615**; **EP 1542063 A4 20100127**; **EP 1542063 B1 20160511**; CN 100410732 C 20080813; CN 1682144 A 20051012; JP 2004157500 A 20040603; JP 3640390 B2 20050420; US 2006147145 A1 20060706; US 7292739 B2 20071106; WO 2004025358 A1 20040325

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